



LOGGERHEADLINES

Sea Turtle News from South Carolina

June - July, 2003

Greetings!

This continues to be a very unusual sea turtle season, as you will read in this issue of *Loggerheadlines*.

Strandings

There were 32 strandings in June compared to 26 last year. However, this is below the five-year average of 38.4. There were 25 loggerheads, five Kemp's ridleys, one green sea turtle and one unidentified. In July, there were 25 strandings, which is again above last year's 20, however it is below the five-year average of 30.6. There were 23 loggerheads, one Kemp's ridley and one green sea turtle. Thus far this season, there have been a total of 109 sea turtle strandings. This is well below the five-year average of 138.8.

"Barnacle Bills", mentioned in the last issue of *Loggerheadlines*, continued to strand, but not at the rate noted in the spring. Only four "Barnacle Bills" stranded in June and July. Overall, these diseased turtles comprised 22.9% of the strandings this year.

Another unusual aspect of this season is the number of live stranded animals, which either died, were euthanized or were taken into rehabilitation. There were a total of 18 this year, which is 16.5% of the total strandings. This is twice the number in 2002 and 2001.

Marine turtles that show signs of boat strikes comprised 22.0 % of the strandings (this is not to say that the boat strike was the "cause of death" in all cases). This is very similar to what is reported in Georgia (see Regional News).

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Necropsy Summary

Necropsies were performed on nine (16%) of the 57 sea turtles that stranded in June and July. Six were loggerheads, two were Kemp's ridleys, and one was a leatherback. Of these nine, seven were female and two were males. One of the loggerheads was a gravid, adult female. There were three subadults and five immatures. In the last *Loggerheadlines*, 61.5% of the turtles necropsied died from chronic conditions. Only one out of the nine (11.1%) died of a chronic condition these past two months. Of the eight acute cases, two had died from boat strikes.

Rehabilitation at the SC Aquarium

So far in 2003, the Aquarium has received nine stranded sea turtles. Five have been successfully rehabilitated and returned to the wild. Four are still being treated.

During June and July, the SC Aquarium accepted two injured loggerheads. The first one came from Harbor Island. It was a large 35.5-inch (curved carapace length) loggerhead that was coming out of the surf in the early morning of June 30th. This animal did not eat for a month. When tests indicated it needed to be wormed, it then began eating the very next day.

On July 11th, a 28-inch (curved carapace length) loggerhead was found on a sandbar off of Fripp Island. This animal's front right flipper had been bitten and mangled, probably by a shark. The flipper had to be amputated at the "elbow" joint. It is recovering quickly.

On July 26th, a 28.4-inch (curved carapace length) loggerhead was found floating off Myrtle Beach by National Marine Fisheries

Service (NMFS) staff conducting a marine mammal survey. The turtle was transported to the Karen Beasley Sea Turtle Hospital on Topsail Island, by a sea turtle volunteer from North Carolina.

The Aquarium released the last of the original four cold-stunned Kemp's ridleys on July 24th at Folly Beach County Park. This turtle had been under their care since January 2003. The aquarium is still treating the juvenile green sea turtle from Myrtle Beach they received on March 29th. It should be released soon pending more keratin growth on the shell.

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Regional News

North Carolina

Dr. Matthew Godfrey reports that as of August 2003 in North Carolina, more than 325 turtles have been found stranded in both inshore and offshore areas. There have been two obvious features to this year's stranding events: a) More turtles appear to have suffered injuries or death due to boat impacts or propeller cuts; b) Some rare size classes or species have been found stranded alive in North Carolina, including a small hawksbill (roughly yearling size) and a small loggerhead (about 14 inch straight carapace length).

In terms of nesting, all beaches have yet to report all their nest counts, but so far we have reports of more than 750 nests statewide. This provisional total already surpasses the 715 total for 2002. There have been no observed leatherback nests, only a few green turtle nests, and a single Kemp's ridley nest. The Kemp's ridley turtle nested at Cape Lookout National Seashore in North Carolina on June 12th during midday. This is the first record of a Kemp's ridley nesting at Cape Lookout and only the second record of a Kemp's ridley nesting in North Carolina (the first record was in 1992).

Details on an ongoing satellite telemetry project involving nesting female loggerheads from Bald Head Island can be seen at this web site:

www.seaturtle.org/tracking

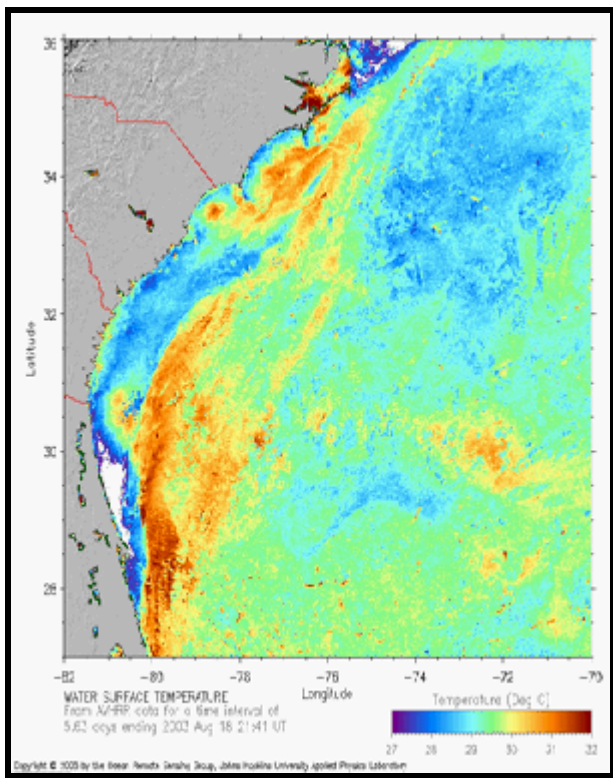
Georgia

Mark Dodd, Georgia Sea Turtle Coordinator, has some exciting news concerning the 2003 loggerhead nesting season. As of mid August, they have 1,461 nests, breaking the previous 15-year record of 1,419 nests set in 1999. Again though mid August, strandings have been high with 200 reported. This is slightly above the five-year average of 191.2. When Mark examined the first 100 strandings, the ones with prop wounds comprise 23.3%. Historically, they were between 8 to 12%. Also, barnacle bills make up 12.8% of the stranding totals.

Florida

Dr. Allen Foley reports that strandings continue to be the worst ever. As of the end of July they are at 1,200 which is 200 more than the previous worst year at this time. He attributes this to: a very persistent red tide in southwest Florida, shrimping in northwest Florida, and an unusually high occurrence of disease along the east coast. The diseased turtles have a variety of problems, but the cause is unknown.

On top of it all, Florida had a cold-stunning in July. People found loggerhead hatchlings in large numbers along the shoreline. The turtles apparently became inactive after crawling into the water during the night and then washed back ashore. About 500 were found on Hutchinson Island and re-released in warmer water in July. The coldest water then moved to Brevard County where about 10,000 hatchlings were found and re-released in August. Another 810 hatchlings were rescued in Flagler County from August 11th to 15th. Please refer to the sea surface temperature map below.



The white area off north Florida is so cold it is off the scale.

Other News

On June 9, U.S. Senator Jim Jeffords of Vermont, the ranking member of the Senate Environment and Public Works Committee, introduced a bill titled the Marine Turtle Conservation Act of 2003 (S. 1210). The purpose of the legislation is to assist in the recovery and protection of marine turtles by supporting projects to conserve their nesting habitats in foreign countries, preventing the illegal trade in marine turtle parts and products, and addressing other threats to the survival of marine turtles. The proposed bill would also authorize \$5 million annually to implement the program.

Preliminary Kemp's ridley turtle nesting reports from the turtle camps in Mexico have been trickling in. As of late May to mid-June, the number of nests documented was already the highest number recorded since the bi-national effort between Mexico and U.S. was established in 1978. The final numbers will be reported as soon as they are available.

Recovery Team News

Don't forget you can review drafts of the new Loggerhead Recovery Plan at this web site <http://northflorida.fws.gov/SeaTurtles/loggerhead-recovery/default-loggerhead.htm> --**Sandy MacPherson**, National Sea Turtle Coordinator with the U.S. Fish and Wildlife Service.

Nesting Update

Because of the news from Georgia on their nesting season, we thought it would be of interest to post the nesting number for this season along with the numbers from 2002 and 1999, the last high year in the cycle. (The nesting numbers through July represent about 94 % of the season). Our numbers are 9% lower than 1999 while Georgia's was 3% higher. This could change slightly when the August totals are added. Hey, we're not complaining. At least it is up!

Thru 7/31	1999	2002	2003
Myrtle Beach S. P.	5	0	4
Huntington Beach S. P.	14	7	17
S.C.U.T.E.	81	76	88
South Island	157	85	93
Cape Island	1,156	691	808
Lighthouse Island		174	300
Deweese Island	13	19	13
Sullivans/Isle of Palms	36	37	33
Folly Beach	54	43	54
Kiawah Island	245	179	221
Seabrook Island	27	28	32
Botany Bay Isl & Plan	292	156	268
Edingsville Beach	65	56	59
Edisto Beach S. P.	61	57	85
Edisto Beach	136	90	59
Harbor Island	64	33	44
Hunting Island	54	45	65
Fripp Island	37	24	52
Pritchards Island	130	90	118
Hilton Head Island	201	169	163
TOTAL	2,828	2,059	2,576

Nesting News

Leatherback Finally Nests

After several non-nesting emergences, reported in the last issue of *Loggerheadlines*, a nest was located on Botany Island on June 17th. A second leatherback nest was laid at Folly Beach on July 3rd at the old Coast Guard Station. Because the dune was eroding away at a rapid rate, the nest was moved on August 8th. It contained 84 large eggs and 30 “spacer” eggs for a total of 114.

For a complete summary of leatherback nesting activity outside of Florida, see the recent article by Rabon et al. (2003) in the *Marine Turtle Newsletter* No. 101, pages 4-8.

Exciting News for Pritchards Island

We had our first tag return on June 4th. This female was originally tagged in 2001 and was the very first turtle ever tagged on Pritchards Island. The tags were still in great condition and we also applied a PIT tag in her left shoulder. She was seen on the beach five more times throughout June and July.

We also had two visiting nesting females from Wassaw Island, Georgia that nested on our beach. The first turtle was tagged in 1999. The second turtle was tagged in 1993 and had not been seen since this date. Pretty amazing! –**Amber VonHarten**

Huntington Beach State Park’s Story

An adult loggerhead we have dubbed “Old Faithful” has come up on the beach probably 40 times this summer, and leaves the same distinctive track: a series of body pits with two small separate holes instead

of one egg chamber. She is often seen by park visitors as late as 7:30 am. An old boat prop wound near the rear of her shell may be the reason she is not able to coordinate her rear flipper enough to excavate a nest. While going through some old files of turtle photos, we were surprised to find a number of photos of this turtle taken over the last decade! – **Mike Walker**

New South Carolina Marine Turtle Conservation Program Web Site

The South Carolina Marine Turtle Conservation Program web site provides extensive information about the program, news and events, and research. It also provides resources to our South Carolina Sea Turtle volunteers. We try to include new items at a regular interval, so visit soon and often at <http://www.dnr.state.sc.us/marine/turtles>.

Research

Satellite Tracking of Nesting Loggerheads

Signals from the four turtles instrumented in 2002 have stopped. However, nearly the entire coastal staff of the Wildlife Diversity Section of DNR assisted by Cape Romain biologists **Sarah Dawsey** and **Mary Catherine Martin**, attached satellite transmitters to five nesting females on July 10th. The goal of the project is to determine post-nesting movements, migration routes, and the size and location of foraging areas.

These new turtles are named after South Carolina sea turtle pioneers, past and present. We hope you will enjoy reading their stories. Maps and videos of the turtles’ migrations can be viewed on the Marine Turtle Conservation Program web site <http://www.dnr.state.sc.us/marine/turtles>.

These turtles are also being affected by the cold-water upwelling, which is now along the mid Atlantic coast. The turtles instrumented at

Bald Head and at Cape islands, which were off the North Carolina /Virginia coast have moved back south of Cape Hatteras. The two that were up in Delaware and Chesapeake Bays are staying put. The waters there are still warm. If you would like to see this phenomenon for yourself, the following web site where you can see real-time sea surface temperatures are available:

http://fermi.jhuapl.edu/avhrr/gs_s/index.html

<http://www.sstcharts.com/>

<http://marine.rutgers.edu/mrs/sat.data2.html>

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COVER PHOTO

Baldwin's Belle taken by Tom Murphy, SC DNR.